

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-16 (canceled)

Claim 17 (new):

Method for calibrating and/or regulating a mixing valve (12) in a cooling circuit of an internal combustion engine (10), with which a cooling fluid flow in the cooling circuit can be separated into two partial flows through a heat exchanger (16) and through a bypass line (20) respectively as a function of an engine outlet temperature (T_{EO}), a cooler outlet temperature (T_{CO}) and a target engine inlet temperature ($T_{Eltarget}$), the method comprising: computing a target mixing ratio (MR_{target}) of the mixing valve (12) from the engine outlet temperature (T_{EO}), the cooler outlet temperature (T_{CO}) and the target engine inlet temperature ($T_{Eltarget}$), computing an actual mixing ratio (MR_{real}) of the mixing valve (12) from the engine outlet temperature (T_{EO}), the cooler outlet temperature (T_{CO}) and the actual engine inlet temperature (T_{Elreal}), computing a correction value (Δx) for a valve control value (u_{valve}) of the mixing valve (12) from the actual mixing ratio (MR_{real}) during operation, and adding the correction value (Δx) to the valve control value (u_{valve}).

Claim 18 (new):

Method according to Claim 17, characterized in that the actual mixing ratio (MR_{real}) is computed to calculate the correction value (Δx) and is compared with the target mixing ratio (MR_{target}).

Claim 19 (new):

Method according to Claim 17, characterized in that the correction value (Δx) is formed from an output quantity of a superimposed control unit (34).

Claim 20 (new):

Method according to Claim 19, characterized in that the superimposed control unit (34) is an integral control unit.

Claim 21 (new):

Method according to Claim 17, characterized in that additional characteristic quantities, particularly a volume flow through the mixing valve (12), an outside temperature and/or an air flow rate through the heat exchanger (16) are taken into consideration in forming the correction value (Δx).

Claim 22 (new):

Method according to Claim 17, characterized in that a plurality of correction values is stored in a correction characteristic curve.

Claim 23 (new):

Method according to Claim 17, characterized in that a plurality of correction values or a plurality of correction characteristic curves are stored in a characteristic diagram.

Claim 24 (new):

Method according to Claim 17, characterized in that the mixing valve (12) is permanently calibrated taking into consideration the correction values (Δx).

Claim 25 (new):

Regulating device for regulating and/or calibrating a mixing valve (12) in a cooling circuit of an internal combustion engine (10), with which a cooling fluid flow in the cooling circuit can be separated into two partial flows through a heat exchanger (16) and through a bypass line (20) respectively as a function of an engine outlet temperature (T_{EO}), a cooler outlet temperature (T_{CO}) and a target engine inlet temperature ($T_{Eltarget}$), the device comprising: means for computing a target mixing ratio (MR_{target}) of the mixing valve (12) from the engine outlet temperature (T_{EO}), the cooler outlet temperature (T_{CO}) and the target engine inlet temperature ($T_{Eltarget}$), for computing an actual mixing ratio (MR_{real}) of the mixing valve (12) from the engine outlet temperature (T_{EO}), the cooler outlet temperature (T_{CO}) and the actual engine inlet temperature (T_{Elreal}), for computing a correction value (Δx) for a valve control value (x_{valve}) of the mixing valve (12) from the actual mixing ratio (MR_{real}) during operation, and for adding the correction value (Δx) to the valve control value (x_{valve}).

Claim 26 (new):

Regulating device according to Claim 25, characterized by means for deriving the correction value (Δx) from the computation of the actual mixing ratio (MR_{real}) and a comparison with the target mixing ratio (MR_{target}).

Claim 27 (new):

Regulating device according to Claim 25, characterized by means for deriving the correction value (Δx) from an output quantity of a superimposed control unit (34).

Claim 28 (new):

Regulating device according to Claim 27, characterized in that the superimposed control unit (34) is an integral control unit.

Claim 29 (new):

Regulating device according to Claim 25, characterized by means for forming the correction value (Δx) from additional characteristic quantities, particularly a volume flow through the mixing valve (12), an outside temperature and/or an air flow rate through the heat exchanger (16).

Claim 30 (new):

Regulating device according to Claim 25, characterized in that a plurality of correction values is stored in a correction characteristic curve.

Claim 31 (new):

Regulating device according to Claim 25, characterized in that a plurality of correction values or a plurality of correction characteristic curves are stored in a characteristic diagram.

Claim 32 (new):

Regulating device according to Claim 25, characterized by means for permanently calibrating the mixing valve (12) taking into consideration the correction values (Δx).